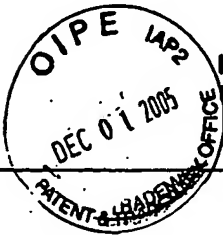


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UNITED STATES. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLAS S	FILING DATE IF APPROPRIATE
	4,517,295	05/14/85	Bracke et al.	435	101	
	4,582,865	04/15/86	Balazs et al.	524	29	
	4,703,108	10/27/87	Silver et al.	530	356	
	4,713,448	12/15/87	Balazs et al.	536	55.1	
	4,780,414	10/25/88	Nimrod et al.	435	101	
	4,784,659	11/15/88	Fleckenstein et al.	623	1	
	4,801,539	01/31/89	Akasaka et al.	435	101	
	4,897,349	01/30/90	Swann et al.	435	101	
	4,957,744	09/18/90	della Valle et al.	424	401	
	4,970,298	11/13/90	Silver et al.	530	356	
	5,017,229	05/21/91	Burns et al.	106	162	
	5,166,331	11/24/92	della Valle et al.	536	55.1	
	5,270,300	12/14/93	Hunziker	514	12	
	5,316,926	05/31/94	Brown et al.	435	101	
	5,336,767	08/09/94	della Valle et al.	536	55.1	
	5,356,883	10/18/94	Kuo et al.	514	54	
	5,368,858	11/29/94	Hunziker	424	423	
	5,413,791	05/09/95	Rhee et al.	424	422	
	5,466,462	11/14/95	Rosenthal et al.	424	426	
	5,468,787	11/21/95	Braden et al.	523	113	
	5,502,081	03/26/96	Kuo et al.	514	777	
	5,512,301	04/30/96	Song et al.	424	484	
	5,527,893	06/18/96	Burns et al.	514	53	
	5,565,210	10/15/96	Rosenthal et al.	424	426	
	5,567,806	10/22/96	Abdul-Malak et al.	530	356	
	5,616,568	04/01/97	Pouyani et al.	514	54	
	5,652,347	07/29/97	Pouyani et al.	536	18.5	

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	5,693,341	12/02/97	Schroeder	424	488	
	5,700,476	12/23/97	Rosenthal et al.	424	426	
	5,769,899	06/23/98	Schwartz et al.	623	18	

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 90/06767	06/28/90	PCT	A61K	37/02		
	WO 96/15888	05/30/96	PCT	B28B3	00		
	WO 97/45532	12/04/97	PCT	C12N	5/00		
	WO 97/18244	5/22/97	PCT	C08B	37/08		
	FR 96 12200	10/07/96	France				

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
LCM	Adams, M.E., "Viscosupplementation as articular therapy," in The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives, T.C. Laurent (ed.), Portland Press, London, pp. 243-253 (1998).
LCM	Amiel et al., "The chondrogenesis of rib perichondrial grafts for repair of full thickness articular cartilage defects in a rabbit model: A one year postoperative assessment." Connect. Tissue Res. 18, pp. 27-39 (1988).
LCM	Balazs and Laurent, "Round table discussion: new applications for hyaluronan," in The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives, T.C. Laurent (ed.), Portland Press, London, pp. 325-336 (1998).
LCM	Band, P.A., "Hyaluronan derivatives: chemistry and clinical applications," in The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives, T.C. Laurent (ed.), Portland Press, London, pp. 33-42 (1998).
LCM	Bitter and Muir, "A Modified Uronic Acid Carbazole Reaction," Anal. Biochem., 4, pp. 330-334 (1962).
LCM	Brittberg et al., "Treatment of deep cartilage defects in the knee with autologous chondrocyte transplantation," New Engl. J. Med., 331, pp. 889-895 (1994).

EXAMINER

Heigh C. Maier

DATE CONSIDERED

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
LCM	Cha, J.S., "Recent developments in the synthesis of aldehydes by reduction of carboxylic acids and their derivatives with metal hydrides. A review," <i>Org. Prep. Proc. Int.</i> , 21, pp. 451-477 (1989).
LCM	Cha et al., "Direct Transformation of Carboxylic Acids into Aldehydes through Acyloxy-9-borabicyclo [3.3.1]nonane," <i>Bull. Korean Chem. Soc.</i> , 9, pp. 48-52 (1988).
LCM	Chu et al., "Articular cartilage repair using allogeneic perichondrocyte-seeded biodegradable porous polylactic acid (PLA): A tissue-engineering study," <i>J. Biomed. Mat. Res.</i> , 29, pp. 1147-1154 (1995).
LCM	Curvall et al., "Modification of polysaccharides containing uronic acid residues," <i>Carbohydr. Res.</i> , 41, pp. 235-239 (1975).
LCM	Dahl et al., "Preparation of Biologically Intact Radioiodinated Hyaluronan of High Specific Radioactivity: Coupling of 125I-Tyramine-Cellobiose to Amino Groups after Partial N-Deacetylation," <i>Anal. Biochem.</i> , 175, pp. 397-407 (1988).
LCM	Danishefsky and Siskovic, "Conversion of carboxyl groups of mucopolysaccharides into amides of amino acid esters," <i>Carbohydr. Res.</i> , 16, pp. 199-205 (1971).
LCM	Denlinger, J.L., "Hyaluronan and its derivatives as viscoelastics in medicine," in <i>The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives</i> , T.C. Laurent (ed.), Portland Press, London, pp. 235-242 (1998).
LCM	Drobnik, J., "Hyaluronan in drug delivery," <i>Adv. Drug Delivery Rev.</i> , 7, pp. 295-308 (1991).
LCM	Fraser et al., "Catabolism of hyaluronan," in <i>The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives</i> , T.C. Laurent (ed.), Portland Press, London, pp. 85-92 (1998).
LCM	Freed et al., "Joint resurfacing using allograft chondrocytes and synthetic biodegradable polymer scaffolds," <i>J. Biomed. Mat. Res.</i> , 28, pp. 891-899 (1994).
LCM	Gombotz and Pettit, "Biodegradable Polymers for Protein and Peptide Drug Delivery," <i>Bioconjugate Chem.</i> , 6, pp. 332-351 (1995).
LCM	Grammatikakis et al., "A Novel Glycosaminoglycan-binding Protein Is the Vertebrate Homologue of the Cell Cycle Control Protein, Cdc37," <i>J. Biol. Chem.</i> , 270, pp. 16198-16205 (1995).
LCM	Grande et al., "The Repair of Experimentally Produced Defects in Rabbit Articular Cartilage by Autologous Chondrocyte Transplantation," <i>J. Orthop. Res.</i> , 7, pp. 208-218 (1989).
LCM	Gustafson, S., "Hyaluronan in drug delivery," in <i>The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives</i> , T.C. Laurent (ed.), Portland Press, London, pp. 291-304 (1998).
LCM	Harada et al., "Chondrogenesis and Osteogenesis of Bone Marrow-derived Cells by Bone-inductive Factor," <i>Bone</i> , 9, pp. 177-183 (1988).

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EXAMINER INITIAL	
LCM	Hauselmann et al., "Synthesis and Turnover of Proteoglycans by Human and Bovine Adult Articular Chondrocytes Cultured in Alginate Beads," <i>Matrix</i> , 12, pp. 116-129 (1992).
LCM	Hauselmann et al., "Adult human chondrocytes cultured in alginate form a matrix similar to native human articular cartilage," <i>Am J. Physiol.</i> , 271, pp. C742-C752 (1996).
DUP	Hohenadl et al., "Two Adjacent N-terminal Glutamines of BM-40 (Osteonectin, SPARC) Act as Amine Acceptor Sites in Transglutaminase C-catalyzed Modification," <i>J. Biol. Chem.</i>, 270, pp. 23415-23420 (1995).
LCM	Homminga et al., "Perichondral grafting for cartilage lesions of the knee," <i>J. Bone Joint Surg.</i> , 72-B, pp. 1003-1007 (1990).
LCM	Homminga et al., "Repair of articular defects by perichondrial grafts: Experiments in the rabbit," <i>Acta Orthop. Scand.</i> , pp. 326-329 (1989).
LCM	Hunziker and Rosenberg, "Repair of Partial-Thickness Defects in Articular Cartilage: Cell Recruitment from the Synovial Membrane," <i>J. Bone Joint Surg.</i> , 78-A, pp. 721-733 (1996).
LCM	Itay et al., "Use of Cultured Embryonal Chick Epiphyseal Chondrocytes as Grafts for Defects in Chick Articular Cartilage," <i>Clin. Orthop.</i> , 220, pp. 284-303 (1987).
LCM	Kalb and Cowley, "Hope for Damaged Joints," <i>Newsweek</i> , p. 55, January 29, 1996.
LCM	King et al., "Beneficial actions of exogenous hyaluronic acid on wound healing," <i>Surgery</i> , 109, pp. 76-84 (1991).
LCM	Knudson, C.B., "Hyaluronan Receptor-directed Assembly of Chondrocyte Pericellular Matrix," <i>J. Cell Biol.</i> , 120, pp. 825-834 (1993).
LCM	Knudson and Knudson, "Hyaluronan-binding proteins in development, tissue homeostasis, and disease," <i>FASEB J.</i> , 7, pp. 1233-1241 (1993).
LCM	Kuettner et al., "Synthesis of Cartilage Matrix by Mammalian Chondrocytes in vitro. I. Isolation, Culture Characteristics, and Morphology," <i>J. Cell Biol.</i> , 93, pp. 743-750 (1982).
DUP	Kuo et al., "Chemical Modification of Hyaluronic Acid by Carbodiimides," <i>Bioconjugate Chem.</i>, 2, pp. 232-241 (1991).
LCM	Kürzer and Douraghi-Zadeh, "Advances in the Chemistry of Carbodiimides," <i>Chem. Rev.</i> , 67, pp. 107-152 (1967).
LCM	Kvam et al., "Purification and Characterization of Hyaluronan from Synovial Fluid," <i>Anal. Biochem.</i> , 211, pp. 44-49 (1993).
LCM	Larsen, N.E., "Management of adhesion formation and soft tissue augmentation with viscoelastics: hyaluronan derivatives," in <i>The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives</i> , T.C. Laurent (ed.), Portland Press, London, pp. 267-281 (1998).

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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

EXAMINER INITIAL	
LCM	Larsen and Balazs, "Drug delivery systems using hyaluronan and its derivatives," <i>Adv. Drug Delivery Rev.</i> , 7, pp. 279-293 (1991).
LCM	Laurencin et al., "Poly(anhydride) administration in high doses in vivo: Studies of biocompatibility and toxicology," <i>J. Biomed. Mat. Res.</i> , 24, pp. 1463-1481 (1990).
LCM	Laurent and Fraser, "Hyaluronan," <i>FASEB J.</i> , 6, pp. 2397-2404 (1992).
LCM	Maleski and Knudson, "Hyaluronan-Mediated Aggregation of Limb Bud Mesenchyme and Mesenchymal Condensation during Chondrogenesis," <i>Exp. Cell Res.</i> , 225, pp. 55-66 (1996).
LCM	McPherson et al., "Collagen Fibrillogenesis In Vitro: A Characterization of Fibril Quality as a Function of Assembly Conditions," <i>Collagen Rel. Res.</i> , 5, pp. 119-135 (1985).
LCM	Morgelin et al., "The cartilage proteoglycan aggregate: assembly through combined protein-carbohydrate and protein-protein interactions," <i>Biophys. Chem.</i> , 50, pp. 113-128 (1994).
LCM	Nakahara et al., "Culture-Expanded Periosteal-Derived Cells Exhibit Osteochondrogenic Potential in Porous Calcium Phosphate Ceramics In Vivo," <i>Clin. Orthop.</i> , 276, pp. 291-298 (1992).
DWP	Noble et al., "Induction of inflammatory gene expression by low-molecular-weight hyaluronan fragments in macrophages," in <i>The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives</i> , T.C. Laurent (ed), Portland Press, London, pp. 219-225 (1998).
LCM	O'Driscoll et al., "Durability of Regenerated Articular Cartilage Produced by Free Autogenous Periosteal Grafts in Major Full-Thickness Defects in Joint Surfaces under the Influence of Continuous Passive Motion," <i>J. Bone Joint Surg.</i> , 70-A, pp. 595-606 (1988).
LCM	Ogamo et al., "Preparation and properties of fluorescent glycosamino-glycuronans labeled with 5-aminofluorescein," <i>Carbohydr. Res.</i> , 105, pp. 69-85 (1982).
LCM	Parameswaran et al., "Labeling of ε-lysine cross-linking sites in proteins with peptide substrates of factor XIIIa and transglutaminase," <i>Proc. Natl. Acad. Sci. U.S.A.</i> , 87, pp. 8472-8475 (1990).
DWP	Pouyani et al., "Functionalized Derivatives of Hyaluronic Acid Oligosaccharides: Drug Carriers and Novel Biomaterials," <i>Bioconjugate Chem.</i> , 5, pp. 339-347 (1994).
LCM	Prestwich et al., "Chemical modification of hyaluronic acid for drug delivery, biomaterials and biochemical probes," in <i>The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives</i> , T.C. Laurent (ed), Portland Press, London, pp. 43-65 (1998).
LCM	Richards and Knowles, "Glutaraldehyde as a Protein Cross-linking Reagent," <i>J. Mol. Biol.</i> , 37, pp. 231-233 (1968).

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EXAMINER INITIAL	
LCM	Robinson et al., "Regenerating Hyaline Cartilage in Articular Defects of Old Chickens Using Implants of Embryonal Chick Chondrocytes Embedded in a New Natural Delivery Substance," <i>Calcif. Tissue Int.</i> , 46, pp. 246-253 (1990).
LCM	Sampath et al., "Recombinant Human Osteogenic Protein-1 (hOP-1) Induces New Bone Formation in Vivo with a Specific Activity Comparable with Natural Bovine Osteogenic Protein and Stimulates Osteoblast Proliferation and Differentiation in Vitro," <i>J. Biol. Chem.</i> , 267, pp. 20352-20362 (1992).
LCM	Scott, J.E., "Chemical morphology of hyaluronan," in <i>The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives</i> , T.C. Laurent (ed.), Portland Press, London, pp. 7-15 (1998).
LCM	Sheng et al., "A Specific Quantitative Colorimetric Assay for L-Asparagine," <i>Anal. Biochem.</i> , 211, 242-249 (1993).
LCM	Shortkroff et al., "Healing of chondral and osteochondral defects in a canine model: the role of cultured chondrocytes in regeneration of articular cartilage," <i>Biomaterials</i> , 17, pp. 147-154 (1996).
LCM	Strachan et al., "Hyaluronate in rheumatology and orthopaedics: Is there a role?" <i>Ann. Rheum. Dis.</i> , 49, 949-952 (1990).
LCM	Vercruysse et al., "Synthesis and in vitro Degradation of New Polyvalent Hydrazide Cross-Linked Hydrogels of Hyaluronic Acid," <i>Bioconjugate Chem.</i> , 8, pp. 686-694 (1997).
LCM	Vilaseca et al., "Protein Conjugates of Defined Structure: Synthesis and Use of a New Carrier Molecule," <i>Bioconjugate Chem.</i> , 4, pp. 515-520 (1993).
LCM	Wakitani et al., "Mesenchymal Cell-Based Repair of Large, Full-Thickness Defects of Articular Cartilage," <i>J. Bone Joint Surg.</i> , 76-A, pp. 579-592 (1994).
LCM	Wakitani et al., "Repair of rabbit articular surfaces with allograft chondrocytes embedded in collagen gel," <i>J. Bone Joint Surg.</i> , 71-B, pp. 74-80 (1989).
LCM	Wang et al., "Recombinant human bone morphogenetic protein induces bone formation," <i>Proc. Natl. Acad. Sci. U.S.A.</i> , 87, pp. 2220-2224 (1990).
LCM	Weiss, C., "Viscoseparation and viscoprotection as therapeutic modalities in the musculoskeletal system," in <i>The Chemistry, Biology and Medical Applications of Hyaluronan and Its Derivatives</i> , T.C. Laurent (ed.), Portland Press, London, pp. 255-265 (1998).
LCM	Wong, S.S., "Chemistry of protein conjugation and crosslinking," CRC Press, Inc., Boca Raton, FL, p. 27 (1993).
LCM	Yang and Moses, "Transforming Growth Factor β 1-induced Changes in Cell Migration, Proliferation, and Angiogenesis in the Chicken Chorioallantoic Membrane," <i>J. Cell Biol.</i> , 111, pp. 731-741 (1990).

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